

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A waveguide device having a plurality of sections arranged in series which acts as a planar waveguide in at least one direction ~~thereof~~ of the device, the device comprising:

a non-circular core including a pumping section and having a pump input surface for receiving pumping radiation at a pumping wavelength and at least one output surface for emitting a laser beam at an output wavelength; and

means for providing pump-light confinement and means for providing output mode control in different ones of the sections of the device along the direction of beam propagation.

2. (original) The device as claimed in claim 1 wherein the core is a single member.

3. (currently amended) The device as claimed in claim 1 wherein the core includes an active core member doped with a lasing ion and ~~[[a]]~~ an undoped passive core member.

4. (currently amended) The device as claimed in claim 1 wherein the means for providing pump-light confinement includes a pump-light containment component having a refractive index different from the core in contact with a surface of the core in ~~[[a]]~~ the pumping section of the device.

5. (currently amended) The device as claimed in claim 4 wherein the means for providing the pump-light containment component is a pump cladding having a refractive index different from the core.

6. (original) The device as claimed in claim 1 wherein the means for providing output mode control includes a coating in contact with the core.

7. (original) The device as claimed in claim 5 wherein the means for providing output mode control includes a mode control cladding in contact with the core.

8. (original) The device as claimed in claim 1 wherein the means for providing output mode control includes a grating in contact with the core.

9. (original) The device as claimed in claim 1 wherein the core is a planar core.

10. (canceled)

11. (original) The device as claimed in claim 1 further comprising a substrate for supporting the core.

12. (currently amended) The device as claimed in claim 1 wherein the device is a planar waveguide laser.

13. (canceled)

14. (original) The device as claimed in claim 1 wherein the core has laser input surface for receiving a source laser beam to be amplified and wherein the device is a optical amplifier.

15. (original) The device as claimed in claim 14 wherein the core is planar and wherein the optical amplifier is a planar waveguide amplifier.

16. (currently amended) The device as claimed in claim 14 wherein the laser input surface is a different surface from either the pumping input surface or the at least one output surface.

17. (original) The device as claimed in claim 14 wherein the laser input surface is the same as the at least one output surface.

18. (currently amended) The device as claimed in claim 1 wherein ~~[[an]]~~ the means for providing output mode control ~~section~~ of the device has a lower NA than ~~[[a]]~~ the pumping section of the device.

19. (original) The device as claimed in claim 18 wherein the pumping section has a NA greater than 0.05.

20. (original) The device as claimed in claim 18 wherein the output mode control section has a NA less than 0.22.

21. (original) The device as claimed in claim 9 wherein the planar core includes doped YAG.

22. (original) The device as claimed in claim 5 wherein the pump cladding has a lower refractive index than the refractive index of the core.

23. (original) The device as claimed in claim 22 wherein the pump cladding is sapphire or undoped YAG.

24. (original) The device as claimed in claim 7 wherein the mode control cladding includes a material having a refractive index between that of the core and that of the pump cladding.

25. (currently amended) The device as claimed in claim 24 wherein the mode control cladding ~~includes~~ is doped or undoped YAG.

26. (currently amended) The device as claimed in claim 9 wherein the planar core includes a first core member which absorbs the pumping radiation, and a separate second core member and the second core member ~~which~~ either does not absorb the pumping radiation or has an absorption lower than the absorption of the first core member at the pumping wavelength.

27. (previously presented) The device as claimed in claim 9 wherein the device is formed as a pair of separate waveguides which are butt-coupled or coupled together by an imaging system.

28. - 30. (canceled)

31. (currently amended) A method for generating a laser beam having a desired output mode, the method comprising:

providing a non-circular core having a pump input surface and at least one output surface, the core serving as a planar waveguide in at least one direction;

pumping the core at the pump input surface with pumping radiation at a pumping wavelength so that an output laser beam is emitted at the at least one output surface at an output wavelength; and

separating the functions of pump-light confinement and output mode control ~~[[to]]~~ using different sections arranged in series along the length of the waveguide.

32. (currently amended) The method as claimed in claim 31 ~~wherein the core has a laser input surface and~~ wherein the method further comprises:

transmitting a source laser beam into the core at ~~the~~ a laser input surface of the core wherein the source laser beam is amplified within the core and wherein the output beam is an amplified source laser beam.

33. (new) The device as claimed in claim 1 wherein the non-circular core has a thickness in the range of about 5 - 200 microns, a width of about 0.5 - 10 mm, and a length of about 10 - 150 mm.

34. (new) The device as claimed in claim 1 wherein the waveguide is a three layer structure.

35. (new) The device as claimed in claim 1 wherein the means for providing pump light confinement includes a pump cladding, the means for providing output mode control includes a mode control cladding different from the pump cladding, and wherein the mode control cladding and the pump cladding have approximately the same thickness.